"Why does Kazakhstan have a more developed startup ecosystem

than Kyrgyzstan, although both share a similar Soviet past?"

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Abstract:

The main purpose of this study is to answer the question of why the startup ecosystem in Kazakhstan is better developed than in Kyrgyzstan, although both have similar Soviet past. Based on research by other authors, 3 main success factors of startup ecosystems have been identified: Institutional Quality, Innovation and Competence, and Market conditions. All the authors stressed the lack of data on long-term results and the need for quantitative indicators, so it was decided to create their own, the world's first data set of 21 startups for each country. A separate statistical table has also been created for general information. The main results after the analysis emphasize that Kazakhstan's success is due to powerful government initiatives such as Astana Hub, The MOST, and other programs. In contrast, Kyrgyzstan's ecosystem suffers from insufficient support and limited access to financial resources. The study provides valuable information that can help policy makers develop more effective startup ecosystems in post-Soviet countries.

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Introduction

Despite sharing a common history and culture, Kazakhstan has achieved a more advanced startup ecosystem than Kyrgyzstan. This study aims to investigate the reasons for this disparity and identify the key elements that have contributed to Kazakhstan's success in fostering startups. The central research question for this study is: Why does Kazakhstan have a more developed startup ecosystem than Kyrgyzstan, although both share a similar Soviet past? To answer this question, we will explore various aspects of institutional quality, innovation, market conditions, and government support in both countries. By examining these factors, we

aim to gain a comprehensive understanding of the strengths and weaknesses of each country's startup environment. The significance of this research stems from its potential to provide valuable insights for policy makers, entrepreneurs, and other stakeholders in Kazakhstan and Kyrgyzstan. By understanding the factors that contribute to successful startup ecosystems, Kyrgyzstan can identify areas for improvement and devise strategies to enhance its own entrepreneurial landscape. Furthermore, this study adds to the ongoing discussion on startup ecosystem development in post-Soviet countries, providing lessons that may be relevant to other nations with similar socio-economic circumstances.

Literature Review

The purpose of the following literature review is to find out why the startup ecosystem in Kazakhstan is better developed than in Kyrgyzstan, and to highlight the factors contributing to success. Several studies provide a comprehensive overview of the factors contributing to the development of startup ecosystems in Kazakhstan and Kyrgyzstan. The primary focus of Skawińska and Zalewski's study is to identify and analyze the key success factors for startups within the European Union. Obtaining data from European Startup Monitor (ESM 2015), which includes information from 2365 startups across 13 countries, and using a Principal Component Analysis (PCA), authors isolated key components contributing to startups' success.

Institutional Quality

First one is an institutional quality: strong formal institutions, such as supportive government policies, effective legal frameworks, and robust educational systems, are crucial for fostering a favorable startup environment. Many research and articles support this factor, admitting it as crucial (sources). For example, Usupbaev I. in his case study at AlmaU finds that

such programs as the "Ecosystem of Student Entrepreneurship" project provides students with the knowledge and skills necessary to start and grow their own businesses. One of the key strengths of Usupbaev's study is its detailed exploration of the specific programs and initiatives that support entrepreneurial education at AlmaU. The comprehensive approach provides valuable insights into how these programs are designed and their impact on students.

Moreover, this focus on educational institutions aligns with broader government initiatives in Kazakhstan that aim to foster innovation and entrepreneurship. Government support through policies such as tax incentives for startups, investment in research and development further emphasizes the importance of high-quality institutions. These policies create a favorable environment not only for startups but also for educational institutions like AlmaU to effectively carry out their mission of developing future entrepreneurs. Similar to Usupbayev (2021), Kosorukova et al. (2023) emphasize the importance of institutional quality in promoting innovation. In particular, they highlight the role of a well-developed innovation ecosystem in Kazakhstan. The presence of high quality infrastructure, such as business incubators and accelerators, supported by strong government policies, provide startups with the necessary resources and support to thrive in the competitive market.

Indeed, Murat Avci and Kadir Ardiç's study (2023) agree with this statement, showing deplorable results of support systems in Kyrgyzstan's startup ecosystem. Only a small fraction of startups reported receiving support from these sources, indicating a significant gap in the ecosystem that needs to be addressed. While Kazakhstan has a large number of startup accelerators, such as AstanaHub, The MOST, etc., the lack of similar support infrastructure in Kyrgyzstan leaves many entrepreneurs without the resources and guidance necessary to navigate the complexities of starting and growing a business. Moreover, the research emphasizes the

minimal interaction between startups and key institutions, such as government agencies and universities, which is significantly different from the situation in Kazakhstan (AlmaU, ITU). According to the study, none of the surveyed startups received government support, and only a few had any contact with universities. This lack of interaction with critical ecosystem participants limits the flow of resources, knowledge, and opportunities to entrepreneurs, further exacerbating the challenges they face. Despite these issues, the study shows that Kyrgyz entrepreneurs are motivated by a desire to make a significant impact on society or to realize personal aspirations rather than purely financial gain. However, the shortcomings of the ecosystem often lead these entrepreneurs to consider relocating their startups to countries with stronger support infrastructure.

However, while these studies emphasize the strengths of Kazakhstan's institutional framework, they also reveal challenges that need to be addressed. For example, the lack of long-term outcome data, as mentioned in Usupbaev's study, indicates that there is a need for more comprehensive metrics to assess the impact of educational initiatives on entrepreneurial success. Additionally, while qualitative evaluations provide valuable insights, integrating quantitative measures could provide a more comprehensive understanding of how these programs contribute to the startup ecosystem. Nonetheless, this supports the assumption that the quality of institutions remains a critical factor for success.

Innovation and Competence

Second is Innovation and Competence: Startups that leverage innovative technologies, prioritize research and development, and possess strong intellectual capital and distinctive competencies are more likely to succeed. Kosorukova et al. (2023) as well emphasize that a

well-developed innovation ecosystem is essential for enhancing company innovation activities. This is particularly relevant in the context of Kazakhstan, where the underdevelopment of startup infrastructure, difficulties in attracting venture capital, and insufficient knowledge exchange have been identified as significant barriers.

For example, If we look at statistics: Kazakhstan has about 40 organizations that act as technology business incubators, including MOST, Astana Hub, and TechGarden. However, the development and impact of these institutions are still limited. The research shows that the level of innovation activity among enterprises in Kazakhstan is notably low. The innovation activity index places Kazakhstan far behind other countries, with only 10.5% of enterprises in Kazakhstan engaging in technological, organizational, or marketing innovations. This is in stark contrast to China's 46.3% and South Korea's 35%.

Despite these challenges, the study notes that Kazakhstan has considerable potential to boost its innovation activities if these barriers can be addressed. In this regard, innovation and competence become critical. Startups that leverage innovative technologies and maintain a strong focus on research and development are more likely to overcome the limitations posed by an underdeveloped ecosystem.

Furthermore, following Kosorukova et al. (2023), improving access to venture capital and promoting knowledge exchange within the innovation ecosystem can help Kazakhstan create an environment where startups can effectively leverage their innovative technologies and competencies. However, despite the comprehensive analysis, the study highlights the need for further research to address the specific challenges faced by individual startups within these

ecosystems. A more detailed examination of these challenges could provide deeper insights into the factors that hinder or facilitate startup success.

Market Conditions

The third factor contributing to startup ecosystem success is Market Conditions. Startups in countries with strong domestic markets tend to focus on local opportunities, while those in smaller countries or catching-up economies often look to expand into international markets (Murat Avci and Kadir Ardiç 2023).

The research examines how the size and strength of domestic markets, access to resources, competitive landscape, and regulatory stability impact startups within the European Union (EU), revealing significant differences between developed and catching-up countries. Startups in large and strong domestic markets, such as those in Germany, France, and the United Kingdom, often focus on exploiting local opportunities. In contrast, startups in smaller or catching-up economies, like those in Kazakhstan and Kyrgyzstan, face limited local demand and are more likely to seek opportunities beyond their national borders from the outset. This push towards international markets is often a necessity for growth due to the constraints of the local market.

For example, Murat Avci and Kadir Ardiç (2023) remarkably highlight the problem of poor market conditions in their research. The study employs a qualitative research method, specifically semi-structured interviews with 21 startups in Bishkek, Kyrgyzstan, allowing for an in-depth understanding of the challenges and opportunities within the local entrepreneurship ecosystem, with a focus on founders' demographics, sources of funding, support systems, and the stages of their startups. One of the main identified problems is the lack of access to initial

funding. The research shows that many startups in Kyrgyzstan rely heavily on personal or family financing due to the shortage of angel investors and venture capital. This financial constraint seriously limits the ability of startups to scale and innovate, creating significant barriers to their long-term success.

Overall, the startup ecosystems of Kazakhstan and Kyrgyzstan, despite their shared post-Soviet history, show significant differences in development. Research highlights

Kazakhstan's stronger institutional support, better access to funding, and more developed innovation infrastructure as key factors contributing to its more advanced startup environment. In contrast, Kyrgyzstan faces substantial challenges, including limited access to capital, inadequate support systems, and minimal institutional engagement, which hinder the growth of its startup ecosystem. While there is considerable literature on Kazakhstan's startup development, there is a noticeable gap in research on Kyrgyzstan's ecosystem, particularly regarding the specific factors that could enhance its entrepreneurial landscape. Further studies are needed to explore these areas and develop strategies to support the growth of startups in Kyrgyzstan.

Methodology

In this chapter, the data and research methodology employed in the study are presented.

The instruments utilized for data collection, including an interview, are detailed.

Research Approach and Instruments

Researchers, including Usupbaev (2021), emphasize the lack of long-term outcome data and the need to integrate quantitative measures, stating that "this research approach could provide a more comprehensive understanding." To address these gaps, I created a custom dataset using a program that includes three tables: startups in Kazakhstan, startups in Kyrgyzstan, and

general data on the startup ecosystems in both countries. For the first two tables, I sampled 21 startups from each country and categorized them based on key criteria:

- Sector
- City
- Number of employees
- Year of establishment (no earlier than 2015)
- Investment received
- Number of customers
- Geographical reach
- Business model
- Partnerships
- Awards

It is important to note that I selected startups that are relatively well-developed and have established a significant presence at least within their respective national markets.

For the general statistics table, I considered criteria:

- Number of startups
- Ease of doing business
- Number of accelerators
- Number of government programs
- Market size
- Foreign direct investment (FDI)
- Global Innovation Index ranking
- Tax regulations
- Total funding

These criterias would help me to most accurately compare each startup ecosystem of countries and highlight significant differences. The data was collected using the following sources: Kolesa.kz, 100 top companies and startups in Kazakhstan in August 2024, 21 top companies and startups in Bishkek in August 2024, DOINGBUSINESS Archive, Astana Hub, Cerebra AI, 1Fit.app, Global Innovation Index 2023, High-Tech Park, Startup Blink, World Bank Group, Google Scholar, weproject, etc.

Findings

General Information and Statistics

The following section will highlight all findings that reveal from analyzing data-set and general sources.

The first key observation from the statistical analysis is that Kazakhstan has a substantial number of startups, totaling 1,210, in contrast to Kyrgyzstan's 206 startups. This disparity indicates a smaller and less developed startup ecosystem in Kyrgyzstan or the lack of openness in the country. This difference is understandable given that Kazakhstan benefits from around 7 government programs, including two prominent startup accelerators, AstanaHub and The MOST. In contrast, Kyrgyzstan has only 1 government program—the High Technology Park—which fosters growth by offering a favorable virtual export-oriented tax regime for IT startups.

The second key observation is the gap between Kazakhstan and Kyrgyzstan's stances in world rankings around the business sector. For example, the World Bank's Ease of Doing Business rankings underscore the above mentioned contrast, where Kazakhstan ranks 25th out of 190 countries, reflecting a regulatory environment that is highly conducive to entrepreneurship. Moreover, the total funding for Kazakhstan's startups is around \$6.06B, showcasing a robust financial infrastructure that supports startup growth. On the other hand, Kyrgyzstan ranks 80th, which is significantly lower, suggesting that its regulatory environment is less supportive for startups. In addition, the funding is also much less, standing at \$228M, reflecting a much smaller financial support.

Another ranking that highlights the difference is the Global Innovation Index (GII).

Kazakhstan ranks 81st out of 132 countries in the GII for 2023, indicating a moderate level of

innovation potential. The government's commitment to promoting innovation is evident in its various programs and initiatives such as Astana Hub and The MOST, which provide startups with necessary resources, guidance, and access to networks. In addition, Kazakhstan's large market size and substantial foreign direct investment (FDI) create a favorable environment for start-ups to flourish. In contrast, Kyrgyzstan ranked 106th out of 132 countries in the Global Innovation Index (GII) 2023. This indicates significant challenges in the country's innovation ecosystem. The lower ranking suggests that Kyrgyzstan faces difficulties in several key areas of innovation, such as limited infrastructure, insufficient human capital development, and less supportive business environments. The High Technology Park, the only government program in the country, while beneficial, may not be enough to create a strong innovation ecosystem on its own. The smaller market size of Kyrgyzstan and low levels of foreign direct investment (FDI) further limit its ability to support and sustain startups.

It is also crucial to take into account the market size which might be a key factor in the development of the business and startup ecosystem. For instance, Kazakhstan, with a population of approximately 19 million people and a Gross Domestic Product (GDP) of around \$259.7 billion, offers a relatively large and diverse market for startups. This large market size provides opportunities for startups to scale their operations, attract investment, and reach a wider range of consumers. In contrast, Kyrgyzstan has a much smaller population of around 6.9 million people and a GDP of roughly \$11.54 billion, presenting significant challenges for startup businesses. The limited market size limits the potential for domestic growth, and the lower purchasing power of its population makes it harder for startups to thrive. Additionally, the smaller economic base and lower levels of foreign direct investment, as well as less developed infrastructure, make it more challenging for businesses to establish and maintain themselves in the country.

Astana Hub and The Most Venture Fund

The analysis of the dataset collected from 21 startups in both Kazakhstan and Kyrgyzstan shows a significant impact of accelerators on the development of the startup ecosystem, especially Astana Hub and The MOST Venture Fund. These two largest accelerators in Central Asia play a crucial role in fostering innovation and business growth in the region. If we look at Kazakhstan's dataset, we will see that there are around 11 out of 21 startups that were funded by 2 main startup accelerators in Central Asia: Astana Hub and/or The MOST. Regarding

The MOST Venture Fund is a private investment fund that has been operating in Central Asia for over 10 years. Its main goal is to identify and support promising technology startups in the region, with a focus on Kazakhstan, Kyrgyzstan, Uzbekistan, Tajikistan, and Turkmenistan. At the pre-seed and seed stages, The MOST provides funding ranging from \$20,000 to \$40,000 for startups. For companies that have reached the Series A level, the fund can provide up to \$700,000. Some notable Kazakhstan's startups that have been supported by The MOST include Cerebra.AI, Qtap Easy Tap, Porte, etc.

Astana Hub, another key player in the Central Asian startup ecosystem established as a government-backed initiative, not only supports startups with funding, but also offers substantial financial incentives that make it an attractive hub for entrepreneurs. One of the most notable benefits provided by Astana Hub is the exemption from several taxes, including corporate income tax, individual income tax, and value-added tax (VAT). These tax incentives create a highly favorable environment for startups, allowing them to reinvest more of their revenue into growth and development rather than being burdened by heavy tax obligations. This financial

relief is a crucial factor in the sustainability and scalability of early-stage startups, enabling them to allocate resources more effectively towards innovation and expansion.

Moreover, Astana Hub offers additional advantages that make it an appealing destination for both local and international entrepreneurs. One of the key benefits is the streamlined visa process, which includes the possibility of obtaining a simplified visa and a work visa for up to five years for foreign participants. This feature is particularly advantageous for startups seeking to attract international talent and expertise, as it simplifies the process of bringing in foreign employees and collaborators. The ability to easily secure long-term visas enhances Kazakhstan's attractiveness as a regional innovation hub and fosters a more diverse and dynamic entrepreneurial ecosystem.

As for the data on Kyrgyzstan, it is evident that approximately 5 out of the 21 analyzed startups have received funding and support from Kazakhstani accelerators. Notable examples include NB Feat, Codify, Smart Technologies, and Mystory, which have successfully completed the Astana Hub acceleration program. Additionally, fintech startup NambaPay has received investment in the amount of \$1,000,000. This trend highlights the increasing inclination of Kyrgyzstani startups towards Kazakhstan, where they can benefit from more robust support systems and resources. The migration of Kyrgyz startups to Kazakhstan is not a coincidence, but rather a strategic decision based on the contrasting levels of support offered in the two countries. Kazakhstan provides a favorable environment for startups, offering not only funding, but also essential resources such as mentoring, networking opportunities, and tax incentives. In contrast, the startup ecosystem in Kyrgyzstan is still in its early stages, with limited government support and few opportunities for startups to access the capital and resources they need. This has led many Kyrgyz entrepreneurs to move their operations to Kazakhstan, where they see a more

favorable environment for their projects to grow and expand. Industry experts like Murat Avci and Kadir Ardiç (2023) have noted that Kyrgyz entrepreneurs are moving to Kazakhstan because of the lack of support from the government in their home country. This trend is supported by the data, which shows that Kyrgyz startups prefer to take advantage of the developed startup ecosystem in Kazakhstan.

Government Support

Other government programs also play a crucial role in shaping the development of startups, small, and medium-sized businesses. When comparing the basic information between the two countries, a significant difference emerges in the level of government support available to entrepreneurs. While Kyrgyzstan currently has only one notable government initiative, the High-Tech Park startup accelerator, Kazakhstan offers a much broader range of support, with approximately seven government programs dedicated to fostering entrepreneurship and innovation.

• Astana Hub (Part of the Digital Kazakhstan Program):

Astana Hub is a government-backed initiative aimed at creating a favorable environment for the development of technology companies. It offers tax exemptions, visa facilitation for foreign participants, and a structured acceleration program. This initiative is a core component of the broader Digital Kazakhstan program, which seeks to digitize the economy and promote technological innovation across various sectors

• Preferential Lending:

This program provides startups and small businesses with access to
 low-interest loans, which makes it easier to obtain the capital needed for

growth and development. Concessional lending is an important tool for reducing financial barriers for entrepreneurs, allowing them to invest in innovation and expand their activities.

• **Industry 4.0**:

The Industry 4.0 program focuses on the digital transformation of Kazakhstan's industrial sector. It encourages the adoption of advanced technologies such as automation, robotics, and artificial intelligence in manufacturing and other industries. This program is designed to enhance the competitiveness of Kazakhstani businesses on a global scale by integrating cutting-edge technology into traditional industries.

QazIndustry:

QazIndustry aims to support the industrial sector through the provision of financial assistance, consulting services and business training programs. It helps companies to introduce new technologies and increase productivity, which is key to modernizing Kazakhstan's industrial base.

• Industrial Development Fund:

This fund provides financial support to industrial enterprises, particularly
in the form of loans and investments in modernization projects. The
Industrial Development Fund is instrumental in driving industrial growth,
ensuring that Kazakhstani companies can compete both locally and
internationally.

• QazTrade:

 QazTrade focuses on promoting Kazakhstan exports and supporting local companies in entering international markets. It provides businesses with the necessary tools and knowledge to navigate global trade, including market research, export financing, and international marketing support

Kazakh Invest:

Kazakh Invest is a national agency dedicated to attracting foreign
investment into Kazakhstan. It plays a crucial role in creating a favorable
investment climate by providing investors with comprehensive support
services, including legal and administrative assistance, as well as
connecting them with local businesses.

These programs together create a powerful support system for startups and small and medium-sized businesses in Kazakhstan, which contributes to the country's dynamic and rapidly developing entrepreneurial ecosystem.

In contrast, Kyrgyzstan has a more limited support system for startups, with only one notable government initiative, the High-Tech Park (HTP) startup accelerator. While HTP plays a vital role in fostering the growth of IT companies and startups within the country, its scope is far narrower compared to the comprehensive range of programs available in Kazakhstan.

• High-Tech Park (HTP):

O HTP is designed to support the IT sector by providing a preferential tax regime for its residents. Companies registered within the park are exempt from most taxes, including corporate income tax and social contributions, and instead pay just 1% of their revenue towards the park's operational needs. This tax incentive is aimed at encouraging the growth of

export-oriented IT services, helping Kyrgyz companies to compete on an international level.

However, the support provided by HTP is largely limited to tax benefits, with less emphasis on other critical areas such as access to funding, mentorship, and international networking opportunities.

If we compare the High-Tech Park (HTP) in Kyrgyzstan with its counterpart, Astana Hub in Kazakhstan, we can see a significant difference in the number of startups that they support. While Astana Hub supports over 970 startups, including 170 foreign participants, HTP only supports 85 resident companies. This difference highlights the smaller scale and limited impact of HTP compared to Astana Hub. This disparity can be attributed to the different support structures and resources available in each country. Astana Hub enjoys the backing of the government, as well as extensive services and a strong international network, which attracts a large number of startups, including foreign participants. This makes Astana Hub a dynamic and globally connected ecosystem, while HTP has a more limited reach and impact on the startup scene. The comprehensive resources offered by Astana Hub, such as tax incentives and visa facilitation, are essential for startups looking to scale and expand into international markets. On the other hand, the High-Tech Park in Kyrgyzstan offers valuable tax benefits but lacks the extensive range of services and international exposure that Astana Hub provides. This limitation may hinder the park's ability to attract and support a wider range of startups, especially those from abroad, potentially slowing the growth of Kyrgyzstan's startup ecosystem overall.

Miscellaneous

In addition, it is worth mentioning that the Kazakhstan startup ecosystem is considerably more open to international markets compared to that of Kyrgyzstan. Based on my dataset, in Kazakhstan, only seven startups are focused exclusively on the local market, while the remaining fourteen are capable of operating in a mixed mode, serving both Kazakh and foreign markets. In contrast, the situation in Kyrgyzstan is different, with around ten startups focusing on the local market and ten others operating in a blended capacity, with only one startup primarily targeting the foreign market. This suggests a stronger inclination and willingness towards international expansion among Kazakhstan-based startups compared to those in Kyrgyzstan.

Additionally, when it comes to some of the limitations of the study, it lies in the disparity in the openness of information between Kazakhstan and Kyrgyzstan. While Kazakhstan's startup ecosystem benefits from more transparent and readily available data, making it easier to analyze key metrics such as customer numbers, partnerships, awards, and investments, obtaining similar information for Kyrgyzstan's startups proved challenging. The lack of accessible data from Kyrgyzstan's side hinders a comprehensive comparison and underscores the need for greater transparency and data availability to better understand and support its startup ecosystem.

Conclusion

This research has explored the significant differences between the startup ecosystems of Kazakhstan and Kyrgyzstan, despite their shared post-Soviet heritage. Through a detailed analysis of institutional quality, innovation and competence, market conditions, and government

support, it has become evident that Kazakhstan has successfully cultivated a more advanced and dynamic startup environment compared to Kyrgyzstan.

Kazakhstan's success can be attributed to strong government support, a well-developed innovation infrastructure, and favorable market conditions, all of which have created a conducive environment for startups to thrive. Programs like Astana Hub and The MOST Venture Fund have played crucial roles in supporting entrepreneurial activities and attracting both local and international startups. The country's ability to provide robust institutional backing and access to capital has also been a significant factor in its success.

In contrast, Kyrgyzstan faces considerable challenges, including limited access to funding, inadequate support systems, and a smaller, less dynamic market. The lack of comprehensive government initiatives and a weaker innovation ecosystem have hindered the growth of its startup environment. While Kyrgyzstan's High-Tech Park provides some support, it pales in comparison to the extensive resources available in Kazakhstan.

The findings of this research underscore the importance of institutional quality, innovation, and market conditions in the development of a successful startup ecosystem. For Kyrgyzstan, the insights gained from Kazakhstan's experience can serve as a valuable guide in addressing its own challenges and fostering a more supportive environment for entrepreneurs. This study not only contributes to the understanding of the factors driving the success of startup ecosystems in post-Soviet countries but also provides practical recommendations for enhancing the entrepreneurial landscape in regions with similar socio-economic contexts.

References

Kosorukova, I., Tereshchenko, O., de Velazco, J. J. H. G., Turishcheva, T., Rudakova, O., & Akhyadov, E. (2023). Development of an Entrepreneurial start-up ecosystem: Socio-economic and legal factors influencing the achievement of ESG principles (Case of Asian Countries). *Journal of Law and Sustainable Development*, 11(4), e555-e555.

Usupbaev, I. (2021). Entrepreneurial Education and Youth Development in Central Asia: Kazakhstan. *Central Asia's Affairs*, 82(2), 21-30.

Avcı, M., & Ardıç, K. (2023). How Successful is the Entrepreneurship Ecosystem in Kyrgyzstan?. *MANAS Sosyal Araştırmalar Dergisi*, *12*(2), 580-599.

Skawińska, E., & Zalewski, R. I. (2020). Success factors of startups in the EU—A comparative study. *Sustainability*, *12*(19), 8200.

Kolesa.kz. Website. Retrieved from: https://kolesa.kz/ (Accessed August 25, 2024).

f6s. Website. Retrieved from: https://www.f6s.com/companies/kazakhstan/lo

https://www.f6s.com/companies/kyrgyzstan/bishkek/lo (Accessed August 18, 2024)

Astana Hub. Website. Retrieved from:

https://astanahub.com/ru/blog/startap-revoliutsiia-v-kazakhstane-nabiraet-oboroty (Accessed August 25, 2024)

https://astanahub.com/ru/blog/startap-revoliutsiia-v-kazakhstane-nabiraet-oboroty (Accessed August 18, 2024)

https://astanahub.com/ru/article/tendentsii-rosta-kak-kyrgyzskie-startapy-zakaliaiutsia-v-kazakhs
tane (Accessed August 28, 2024)

High-Tech Park. Website. Retrieved from: https://http.kg/ (Accessed August 24, 2024)

StartupBlink. Website. Retrieved from:

https://www.startupblink.com/startup-ecosystem/kazakhstan (Accessed August 25, 2024)

https://www.startupblink.com/startup-ecosystem/kyrgyzstan (Accessed August 23, 2024)

WIPO. *Website*. Retrieved from: https://www.wipo.int/gii-ranking/en/kazakhstan (Accessed August 23, 2024)

WIPO. Website. Retrieved from:

https://www.wipo.int/edocs/pubdocs/en/wipo-pub-2000-2023/kg.pdf (Accessed August 23, 2024)

WORLD BANK GROUP. Website. Retrieved from:

https://archive.doingbusiness.org/en/rankings (Accessed August 20, 2024)

Cerebra. Website. Retrieved from: https://cerebra.kz/ (Accessed August 20, 2024)

1Fit.app. Website. Retrieved from: https://lfit.app/ru (Accessed August 20, 2024)

Weproject. Website. Retrieved from:

https://weproject.media/articles/detail/o-parke-vysokikh-tekhnologiy-v-kyrgyzstane-i-kakie-prive legii-est-u-rezidentov/ (Accessed August 23, 2024)

Wikipedia. *Website*. Retrieved from: https://en.wikipedia.org/wiki/Economy_of_Kazakhstan (Accessed August 20, 2024)

MOST Ventures Fund. *Website*. Retrieved from: https://mostfund.vc/ (Accessed August 18, 2024)

NB fit. Website. Retrieved from: https://courses.nbfit.online/ (Accessed August 23, 2024)

THE TECH. Website. Retrieved from:

https://the-tech.kz/8-startapov-iz-kyrgyzstana-kotorymi-my-gordilis-v-2023-godu/ (Accessed August 18, 2024)

GOV.KZ. Министерство цифрового развития, инноваций, и аэрокосмической промышленности Республики Казахстане. *Website*. Retrieved from:

https://www.gov.kz/memleket/entities/mdai/activities/1501?lang=ru&parentId=9 (Accessed August 22, 2024)

Centercredit. Website. Retrieved from:

https://www.bcc.kz/business/government-programm-damu/ (Accessed August 22, 2024)

Официальный информационный ресурс Премьер-Министра Республики Казахстан.

Website. Retrieved from:

https://primeminister.kz/ru/news/reviews/vnedrenie-industrii-40-v-kazahstane-ili-kak-umnye-zav ody-spravilis-so-svoey-rabotoy-v-period-karantina-i-mirovoy-pandemii-1483456 (Accessed August 22, 2024)

QazIndustry. Website. Retrieved from: https://qazindustry.gov.kz/ (Accessed August 22, 2024)

Фонд развития промышленности. *Website*. Retrieved from: https://idfrk.kz/ru/ (Accessed August 22, 2024)

QazTrade. *Website*. Retrieved from: https://www.qaztradeacademy.kz/ (Accessed August 22, 2024)

Министерство торговли и интеграции Республики Казахстан. *Website*. Retrieved from: https://www.gov.kz/memleket/entities/mti/press/news/details/652186?lang=ru (Accessed August 24, 2024)

Kazakh Invest. Website. Retrieved from: https://invest.gov.kz/ru/ (Accessed August 22, 2024)